



OWNER'S MANUAL

2.4GHz DIGITAL SPREAD SPECTRUM CORDLESS TELEPHONE SYSTEM

Accessory Handset For Use With 20-2432 System

Introduction

IMPORTANT:

The 20-2422 is an Accessory Handset for use with the 20-2432 system. You must have the 20-2432 in order to use this 20-2422 Accessory Handset.

This manual is designed to familiarize you with the 20-2422 Accessory Handset setup, registration and basic functions. For detailed operational instructions, please refer to the 20-2432 Owner's Manual.

To order additional system Handsets (model# 2422), battery packs, or headsets, call SPRINT NATIONAL HELP DESK at 1-800-949-4357; or visit one of Sprint's conveniently located Retail stores.

National Help Desk Call Sprint
TOLL FREE AT 1-800-949-4357

Important Safety Instructions

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons , including the following:

- 1.** Read and understand all instructions.
- 2.** Follow all warnings and instructions marked on the product.
- 3.** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 4.** Do not use this product near water (for example, near a bath tub, kitchen sink, or swimming pool).
- 5.** Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 6.** Slots and openings in the cabinet and the back or bottom are provided for ventilation. To protect it from overheating, these openings must not be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation where proper ventilation is not provided.
- 7.** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
- 8.** Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
- 9.** Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
- 10.** To reduce the risk of electric shock, do not disassemble this product, but take it to an authorized service facility. Opening or removing cabinet parts other than specified access doors may expose you to dangerous voltages or other risks. Incorrect reassembling can cause electric shock when the appliance is subsequently used.
- 11.** Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

12. Unplug this product from the wall outlet and refer servicing to a Sprint authorized service facility under the following conditions:

- A. When the power supply cord or plug is damaged or frayed.
- B. If liquid has been spilled into the product.
- C. If the product has been exposed to rain or water.
- D. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, because improper adjustment of other controls may result in damage and will often require extensive work by an authorized technician to restore the product to normal operation.
- E. If the product has been dropped and the cabinet has been damaged.
- F. If the product exhibits a distinct change in performance.

13. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lighting.

14. Do not use the telephone to report a gas leak in the vicinity of the leak.

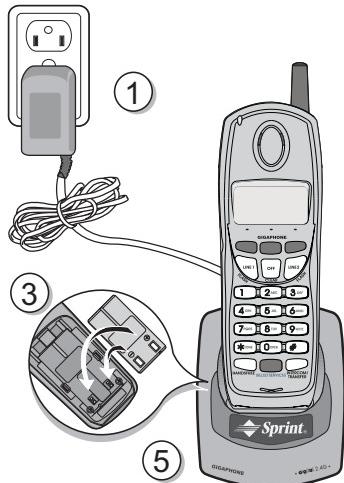
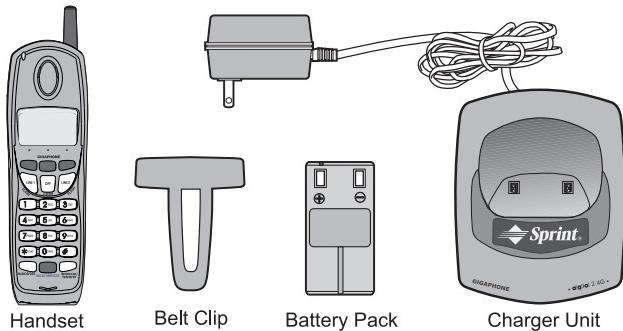
SAVE THESE INSTRUCTIONS

Getting Started

Setup

Registration And Operation Of The 20-2422 Accessory Handset

The accessory Handset consists of the following:



Setup Of The 20-2422 Accessory Handset

1. Plug the AC power adapter into an electrical outlet.
2. Remove the Handset battery cover by pressing on the indent and sliding downward.
3. Place the new battery pack in the Handset, with the metal contacts aligned with the charge contacts in the battery compartment.
4. Replace the battery cover by sliding it upward.
5. Place the Handset in the Charge Cradle, and allow it to charge for 12 hours. After the initial charge, a maintenance charge of 8 hours should be sufficient.

Installation of Battery Pack in Handset

Your 2-Line 20-2432 system can operate up to 8 Handsets.

The original Handset that is shipped with your 2-Line system will be automatically registered to the Base. This Handset is **HANDSET 1**.

As you register additional Handsets to the system, they will be assigned extension numbers in the following order: **HANDSET 2, HANDSET 3, HANDSET 4**, and so forth.

Whenever a Handset battery pack is installed, the Handset will automatically begin **SEARCHING FOR BASE** (if previously registered), or it will prompt you to **ENTER BASE ID** to register the new Handset.

BEFORE USING YOUR HANDSET(S), CAREFULLY PEEL OFF THE PROTECTIVE FILM, COVERING THE DISPLAY.

Registration

Enter Base ID Code

1. After charging the Handset, remove it from its Charge Cradle; the screen will display:



alternating with this screen:



2. If, after charging the Handset, you see:



3. Press **NEW**. You will now see the **ENTER BASE ID** screen as described in step 1.
4. Find the **BASE ID Code** by doing the following: (the Base must be in idle (OFF) mode)

A. At the **Base**, press **MENU**

B. Scroll down to **DISPLAY BASE-ID**

C. Press **OK**. The Base screen will display the 15-digit **ID Code** for approximately 60 seconds. Afterwards, it will return to the idle screen.

5. Enter the 15-digit **Base ID Code** into the Handset ; then press **OK**.

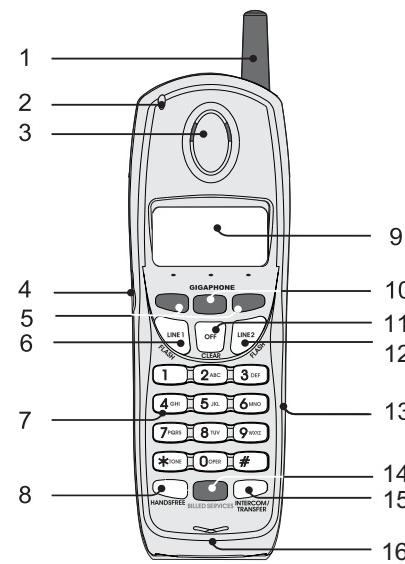


6. Wait approximately 15 to 60 seconds. You will hear confirmation beeps from the Base and Handset. The newly registered Handset will now assign itself the lowest handset number not previously assigned to a different system Handset (1 through 8).

7. If the Handset displays **REJECTED BY BASE** or continues to display **SEARCHING FOR BASE** for well beyond 60 seconds, try the registration process again by repeating the above steps.

Congratulations! You can now enjoy the benefits of your 2-Line Multi-Handset system.

The Handset Layout



1. Antenna
2. Message Waiting Indicator
3. Earpiece
4. Headset Jack (2.5mm)
5. Scroll Keys
6. Line 1 (Flash)
7. Dialing Keys (0-9,*,#)
8. Handsfree Speakerphone
9. LCD Display
10. Select/OK
11. Off (Clear)
12. Line 2 (Flash)
13. Battery Compartment (back of handset)
14. Billed Services Key
15. Intercom/Transfer Key
16. Microphone

Handset Operation

Handset Indicators

Handset Icons

Icon	Description
	<u>Line In Use</u> indicator On steady with no number next to it when a parallel set is in use. On steady with one or more numbers next to it, indicating which extensions are using the line. For example, 12 indicates that Handset 1 and Handset 2 are on an outside call using Line 1.
	<u>Intercom</u> indicator On steady with the extension numbers currently on an intercom call. For example, 02 indicates that the Base and Handset 2 are on an intercom call.
	<u>Battery</u> indicator (Only in Handset) Cycles (Low, Medium, and High) when Handset battery is charging. Flashes when a low battery condition is detected.
	<u>Mute</u> indicator On steady when the Handset or Base microphone is muted.
	<u>Hold</u> indicator On steady when the line is on hold.
	<u>Handset Registration</u> indicator On steady when a Handset is not registered, or is searching for a Base unit.
	<u>Enhanced Mode</u> indicator On steady when active Handset or Base is in Enhanced mode.
	<u>AC Power Failure</u> Indicator On steady when the AC power fails, the spare battery in the Base Unit is providing power backup.

Handset LEDs

LED	Description
Message Waiting	<ul style="list-style-type: none"> Lights to indicate that you have new messages in your voicemail. Service must be subscribed to through your local telephone company.

Additional Information

Headset Operation

Your 2-Line cordless Handset is equipped with a 2.5mm Headset Jack for use with an optional accessory Headset for hands-free operation. If you choose to use the Headset option, you must obtain an optional accessory Headset, which is compatible with the **20-2432** system.

To purchase a Headset, call Toll Free at 1-800-949-4357.

Once you have a compatible 2.5mm Headset, locate the Headset Jack on the Handset. Connect the plug on the Headset cord to the jack(under a small rubber flag) on the cordless Handset. The plug should fit securely. Do not force the connection.



Operation

NOTE :

Whenever a compatible Headset is connected to the cordless Handset, the microphone on the Handset will be muted. This is done to limit the effect of background noise.

Belt Clip

The **20-2422** is also equipped with a detachable belt clip. Align the pins on the inside edge of the clip with the notches on the sides of the Handset. The belt clip should snap securely into place. Do not force the connection.



Taking Care Of Your Telephone

Your cordless telephone contains sophisticated electronic parts, so it must be treated with care.

Avoid rough treatment

Place the Handset down gently. Save the original packing materials to protect your telephone if you ever need to ship it.

Avoid water

Your telephone can be damaged if it gets wet. Do not use the Handset outdoors in the rain, or handle it with wet hands. Do not install your Base Unit near a sink, bathtub or shower.

Electrical storms

Electrical storms can sometimes cause power surges harmful to electronic equipment.

For your own safety, use caution when using electric appliances during storms.

Cleaning your telephone

Your telephone has a durable plastic casing that should retain its luster for many years. Clean it only with a soft cloth slightly dampened with water or a mild soap. Do not use excess water or cleaning solvents of any kind.

Remember that electrical appliances can cause serious injury if used when you are wet or standing in water. If your Base Unit should fall into water, **DO NOT RETRIEVE IT UNTIL YOU UNPLUG THE POWER CORD AND TELEPHONE LINE CORDS FROM THE WALL.** Then pull the unit out by the unplugged cords.

In Case Of Difficulty

If you have difficulty operating your phone, the suggestions below should solve the problem. If you still have difficulty after trying these suggestions, call SPRINT NATIONAL HELP DESK at 1-800-949-4357.

The Phone Doesn't Work At All

- Make sure the Power Cord is plugged
- Make sure the telephone line cord is plugged firmly into the Base Unit and the telephone wall jack.
- Make sure the batteries are properly charged. If the 'LOW BATTERY' message is shown, the battery pack needs charging.
- Is the Handset registered to the Base? See **Registration**.

No Dial Tone

- First check all the suggestions above.
- If you still don't hear a dial tone, disconnect the Base Unit from the telephone jack and connect a different phone. If there is no dial tone on that phone either, the problem is in your wiring or local service. Call your local telephone company.

You Get Noise, Static, Or A Weak Signal Even When You're Near The Base Unit

- Household appliances plugged into the same circuit as the Base Unit can sometimes cause interference. Try moving the appliance or the Base Unit to another outlet.

You Get Noise, Static, Or A Weak Signal When You're Away From The Base Unit

- You may be out of range. Either move closer to the Base, or relocate the Base Unit.
- The layout of your home may be limiting the range. Try moving the Base Unit to another position.

The Handset Does Not Ring When You Receive A Call

- Make sure you have the Handset ringer activated. To set the ringer, see **HANDSET and BASE SETTINGS** in the 20-2432 User's Manual.
- Make sure the telephone line cord is plugged firmly into the Base Unit and the telephone jack. Make sure the power cord is plugged in.
- You may be too far from the Base Unit.
- You may have too many extension phones on your telephone line to allow all of

In Case Of Difficulty

them to ring. Try unplugging some of the other phones.

You Hear Other Calls While Using Your Phone

- Disconnect your Base Unit from the telephone jack, and plug in a regular telephone. If you still hear other calls, the problem is probably in your wiring or local service. Call your local telephone company.

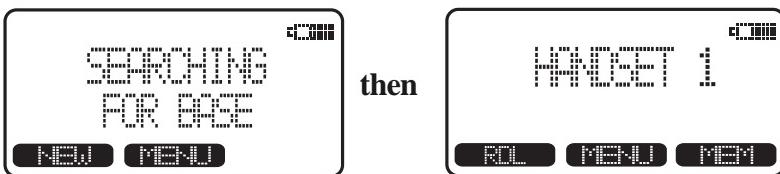
You Hear Noise In The Handset, And None Of The Keys Or Buttons Work

- Make sure the power cord is plugged in.

Common Cure For Electronic Equipment

If the unit does not seem to be responding normally, then try putting the Handset in the cradle. If it does not seem to respond, do the following (in the order listed) :

1. Disconnect the power to the Base.
2. Disconnect the Handset battery, and spare battery pack, if applicable.
3. Wait a few minutes.
4. Connect power to the Base.
5. Re-install the battery pack(s).
6. Watch for Handset to display :



Warranty Statement

The Manufacturer's Limited Warranty, to the original purchaser only, the material and workmanship of this product for ONE YEAR from the date of purchase. The manufacturer will repair or replace, at our option, this product without charge should it fail due to a defect in material or workmanship within that time period.

This warranty does not apply to loss or damage which is the result of accident, misuse or negligence. All other warranties, expressed, implied, or statutory, including warranties of fitness for a particular purpose, are limited to the time period listed and are otherwise excluded from this warranty. The manufacturer may, at its option, void the warranty if unauthorized repairs are attempted. Additionally, the manufacturer shall not be liable for any incidental or consequential damage or commercial loss, nor for any other loss or damages.

The manufacturer assumes no responsibility for products sent without prior Return Authorization.

To arrange for service, in or out of warranty, please call Customer Service at 1-800-949-4357. For warranty service, proof of purchase is required.

FCC, ACTA and IC Regulations

This equipment complies with Parts 15 of the Federal Communications Commission (FCC) rules for the United States. It also complies with regulations RSS210 and CS-03 of Industry and Science Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

A label is located on the underside of the Base Unit containing either the FCC registration number and Ringer Equivalence Number (REN) and Load Number. You must, upon request, provide this information to your local telephone company.

This equipment is compatible with inductively coupled hearing aids.

Should you experience trouble with this telephone equipment, please contact:

SPRINT NATIONAL HELP DESK at 1-800-949-4357.

For repair/warranty information. The telephone company may ask you to disconnect this equipment from the line network until the problem has been corrected.

FCC Part 15

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The equipment has been tested and found to comply with part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet or on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC, ACTA and IC Regulations

FCC Part 68 and ACTA

If this equipment was approved for connection to the telephone network prior to July 23, 2001, it complies with Part 68 of the Federal Communications Commission (FCC) rules. If the equipment was approved after that date, it complies with the Part 68 rules and with Technical Requirements for Connection of Equipment to the Telephone Network adopted by the Administrative Council for Terminal Attachments (ACTA). We are required to provide you with the following information.

1. Product identifier and REN information

The label on the back or bottom of this equipment contains, among other things, an identifier indicating product approval and the Ringer Equivalence Number (REN). This information must be provided to your local telephone company upon request. For equipment approved prior to July 23, 2001, the product identifier is preceded by the phrase "FCC Reg No." and the REN is listed separately. For equipment approved after that date, the product identifier is preceded by "US" and a colon (:), and the REN is encoded in the product identifier without a decimal point as the sixth and seventh characters following the colon. For example, the product identifier US:AAAEQ03T123XYZ would indicate an REN of 0.3.

The REN is used to determine how many devices you may connect to your telephone line and still have them ring when you are called. In most, but not all areas, the sum of all RENs should be five (5.0) or less. You may want to contact your local telephone company for more information.

2. Connection and use with the nationwide telephone network

The plug and jack used to connect this equipment to the premises wiring and the telephone network must comply with the applicable Part 68 rules and technical requirements adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. An RJ11 jack should normally be used for connecting to a single line and an RJ14 jack for two lines. See Installation Instructions in the user's manual. This equipment may not be used with Coin Telephone Lines or with Party Lines. If you have specially wired alarm dialing equipment connected to your telephone line, ensure the connection of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

3. Repair instructions

If this equipment is malfunctioning, it must be unplugged from the modular jack until the problem has been corrected. Repairs to this telephone equipment can only be made by the manufacturer or its authorized agents. For repair procedures, follow the instructions outlined under the Limited Warranty.

4. Rights of the telephone company

If this equipment is causing harm to the telephone network, the telephone company may temporarily discontinue your telephone service. The telephone company is required to notify you before interrupting service. If advance notice is not practical, you will be notified as soon as possible. You will be given the opportunity to correct the problem and the telephone company is required to inform you of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operation, or procedures that could affect the proper functioning of this product. The telephone company is required to notify you if such changes are planned.

5. Hearing aid compatibility

If this product is equipped with a corded or cordless handset, it is hearing aid compatible.

6. Programming/testing of emergency numbers

If this product has memory dialing locations, you may choose to store police, fire department and emergency medical service telephone numbers in these locations. If you do, please keep three things in mind:

- a We recommend that you also write the telephone number on the directory card, so that you can still dial the emergency number manually if the memory dialing feature doesn't work.
- b This feature is provided only as a convenience, and the manufacturer assumes no responsibility for customer reliance upon the memory feature.
- c Testing the emergency telephone numbers you have stored is not recommended. However, if you do make a call to an emergency number:
 - You must remain on the line and briefly explain the reason for the call before hanging up.
 - Programming/testing of emergency numbers should be performed during off-peak hours, such as in the early morning or late evening, when the emergency services tend to be less busy.

IC (Industry Canada)

This telephone is registered for use in Canada.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

Notice:

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Notice:

The Ringer Equivalence Number (REN) for this terminal equipment is 0.0. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of services in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution :

Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

Your cordless phone is designed to operate at the maximum power allowed by the FCC and IC. This means your Handset and Base Unit can communicate only over a certain distance - which will depend on the location of the Base Unit and Handset, weather, and the construction and layout of your home or office.

Technical Specifications

FREQUENCY CONTROL

Crystal controlled
PLL synthesizer

TRANSMIT FREQUENCY

2401.056 - 2481.408 MHz

RECEIVE FREQUENCY

2401.056 - 2481.408 MHz

CHANNELS

94 Channels

NOMINAL RANGE EFFECTIVE

Maximum power allowed by FCC and IC.
Actual operating range may vary according
to environmental conditions at the time of
use.

SIZE

Handset : 174mm x 50mm x 34mm
(including antenna)

Charger : 78mm x 65mm x 45mm

WEIGHT

Handset : 122 grams
(excluding battery pack)
Charger : 170 grams

POWER REQUIREMENTS

Handset : 2.4V 1500mAh NiMH
or 2.4V 800mAh Ni-Cd
Battery Pack

Charger : 6 VDC @ 300mA

MEMORY

Directory : 50 Memory locations;
32 digits per location.

CID : Alphanumeric Display
50 Memory locations

**SPECIFICATIONS ARE
TYPICAL AND MAY CHANGE
WITHOUT NOTICE.**